Computing Educators Oral History Project
Eric Roberts video snippet transcript
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Programming and computational thinking

… lots of jobs that do require programming unless we produce people who can do it, everyone is hosed. [That's American parlance for "gone pear-shaped" in English.] And I think it's more pernicious as a perception that programming has gotten easier in recent years and one of the talks I'm giving later on this same trip is that no, that's just not true. It's easier to get prototypes working and much harder to get real systems working. Just a couple of things about Stanford's strategy (I'll go quickly through this). We've implemented computational thinking everywhere by trying to make our introductory courses as broadly based as we can and get … our goal is to get everyone in them without having them be required. That's to funnel people into the major as well. We have about 75% of all Stanford undergraduates taking some course in our department, which is … we're not there yet, but that's a lot of students. And only at the height of our time back (back up in time) only about 12% of Stanford actually majored in, focused in, took a computer science degree. We lost people after the dot com bust in 2000. We were up at 200 and we fell to 141. Our numbers have skyrocketed in the last two years and I bet this happens in other institutions too. So computational thinking is seen as a way to generate students for departments that have too few. We may be in trouble when we have too many, fighting the last war.